

# 20" THICKNESS PLANER

Model 208

Instruction Manual & Parts List

M-0460217



# ***POWERMATIC***

WMH TOOL GROUP

(800) 274-6848  
[www.powermatic.com](http://www.powermatic.com)

This manual has been prepared for the owner and operators of a Powermatic Model 208 Planer. Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Completely read the safety and maintenance instructions before operating or servicing the machine. To obtain maximum life and efficiency from your planer and to aid in using the machine safely, read this manual thoroughly and follow all instructions carefully.

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The WMH Tool Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Repair Stations located throughout the United States can give you quick service.

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## **SAFETY: General Rules**

**READ THE MANUAL:** Always read the owner's manual carefully before attempting to use the machine. Know the limitations and hazards associated with its use.

**INSTALLATION:** If mounting machine to the floor, use high quality anchor bolts through the mounting holes on the base. If using a mobile base, be sure to lock the wheels.

**PROTECTION:** Take every precaution to protect yourself, others around you, and the machine itself, from improper use. Safety is a combination of using common sense, knowing how to use the machine, and being alert at all times when using the machine.

**EYES:** Always wear approved safety goggles, glasses, or a face shield when operating this machine. There are no exceptions to this rule.

**DRESS CODE:** Do not wear loose clothing, neckties, jewelry, or gloves that can get caught in moving parts. Confine long hair. Keep sleeves above the elbow.

**PLACEMENT:** Place machine so that potential kickback area is not in line with aisles, doorways, wash stations, or other work areas.

**ELECTRICAL GROUNDING:** Your machine must be electrically grounded. If a cord and plug are used, make certain the grounding lug connects to a suitable ground. Follow the grounding procedure indicated by the National Electric Code. Keep power tools in dry areas free from moisture.

**GUARDS:** Be sure machine guards are in place and in good working order. Use them at all times on operations where they can be used. If a guard must be removed for any operation, make sure it is replaced immediately following completion of that operation.

**POWER OFF:** Make sure the machine is either unplugged or electrically disconnected and locked out when performing maintenance or service work.

**HOUSEKEEPING:** Before turning on machine, remove all extra equipment such as keys, wrenches, scrap, stock, and cleaning rags from the machine. Keep the area around machine clean and free of

scrap material and sawdust to minimize the danger of slipping.

**POWER ON:** On machines equipped with a manual starter make sure the starter is in "OFF" position before connecting power to machine.

**CHECK DAMAGED PARTS:** Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect the machine's operation. A guard or other part that is damaged should be properly repaired or replaced.

**TURN POWER OFF:** Never leave machine running attended. Do not leave machine until it comes to a complete stop.

**IF YOU ARE NOT** thoroughly familiar with the operation of planers, obtain advice from your supervisor, instructor or other qualified person.

**DRUGS, ALCOHOL, MEDICATION:** Do not operate tool while under the influence of drugs, alcohol, or any medication.

**WARNING:** The dust generated by certain woods and wood products can be dangerous to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.



## **SAFETY: Specific Rules**

**KEEP CUTTERHEAD SHARP** and free of all rust and pitch.

**CHECK MATERIAL** for loose knots, nails and other defects.

**REMOVE SHAVINGS** only with the power "off".

**CHECK** that the switch is in "off" position before plugging in power cord.

**BEFORE MOVING** table upward or downward, loosen locking knobs. After choosing proper position, tighten locking knobs.

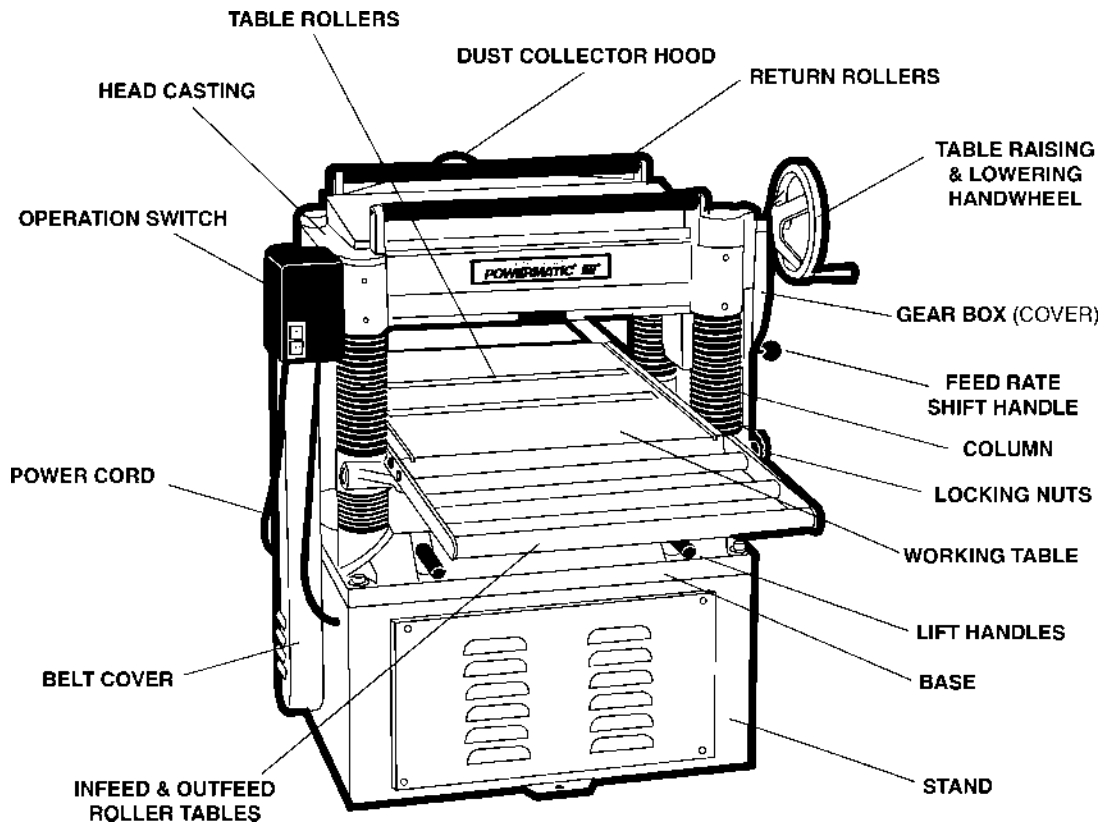
**BE SURE** the knives of cutterhead are correct and all hex screws are secured tightly before use.

**KEEP HANDS AWAY** from the feed rolls and cutterhead.

**REMOVE** adjusting tools and loose articles from machine before operating.

**DO NOT OPERATE** machine while the gear cover is open.

**FEATURES & SPECIFICATIONS - Model 208, 20" planer**



**FIGURE 1**

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Table Area .....                | 25-3/4" x 20"                        |
| Maximum planing width .....     | 20"                                  |
| Maximum planing thickness ..... | 8"                                   |
| Full width cutting depth .....  | 3/32"                                |
| Minmum planing length .....     | 6-3/4"                               |
| Knives .....                    | 4                                    |
| Blade size .....                | 20" x 1" x 1/8"                      |
| Cutterhead speed .....          | 5,000 RPM                            |
| Cuts per minute .....           | 20,000                               |
| Cutterhead diameter .....       | 3-3/16"                              |
| Feeding speed .....             | 24 & 31 FPM                          |
| Motor .....                     | 3HP, 1Ph, 230V<br>5HP, 3Ph, 230/460V |
| Dust chute .....                | 5" dia.                              |
| Overall dimensions .....        | 26" L x 36-5/8" W x 41-3/8" H        |
| Net weight .....                | 640 lbs.                             |

## RECEIVING THE PLANER

Carefully unpack the planer and any loose items from the wood crate and inspect for damage. Any damage should be reported to your distributor and shipping agent immediately. Before proceeding further, read your manual thoroughly to familiarize yourself with proper assembly, maintenance and safety procedures.

Remove the screws that hold planer to the shipping crate. Remove the protective coating from the table, bed rolls, feed rolls, cutterhead and loose items packed with the machine, including lifting handles and motor pulley. This coating may be removed with a soft cloth moistened with Kerosene. DO NOT use acetone, gasoline or lacquer thinner for this purpose. DO NOT use solvents on plastic parts.

**⚠ CAUTION:** Use care when cleaning the cutterhead as knives are very sharp.

## INSTALLATION & ASSEMBLY

### LIFTING HANDLES

There are four lifting handles, Figure 2, furnished with the machine. If any type of sling is used to lift the machine, be sure to attach to lifting handles only. Make sure machine is kept in level position while lifting. The lifting handles can be pushed back in when not in use.

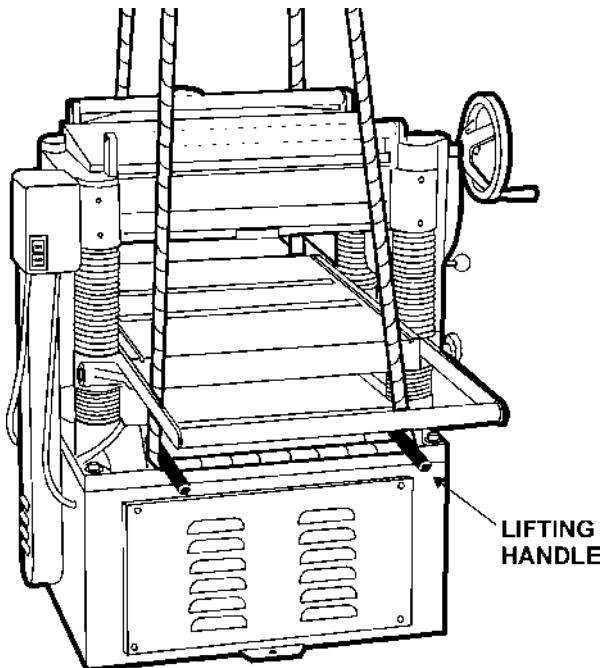


FIGURE 2

## STAND ASSEMBLY

For best planing performance, locate planer on solid, level foundation and anchor to the floor with good quality lag screws:

1. With machine in position, test table surface lengthwise and crosswise with machinist level. Place metal shims under low corners.
2. Check that all four corners are supported, then tighten lag screws.
3. Re-test level of table surface in both directions, and adjust if necessary.

### TABLE EXTENSION ROLLERS

Mount the table extension rollers to the table using the provided hex hd. screws (A) and washers, Figure 3. The rollers should be adjusted before using the planer, see "Adjusting Table Extension Rollers" pg. 8.

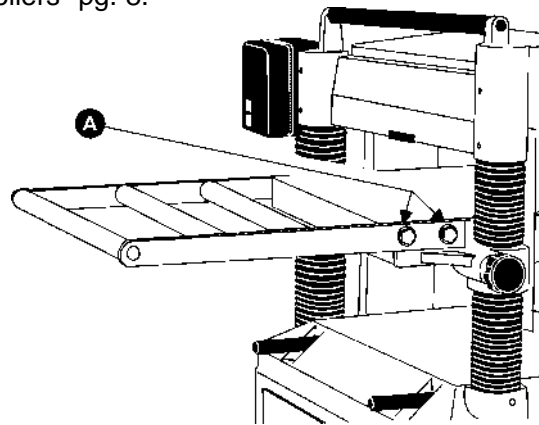


FIGURE 3

### MOTOR, MOTOR PULLEY & BELT

1. Assemble the motor pulley (A) to the motor shaft by aligning it with the key in the shaft, and tighten the screw (B) in the motor shaft, as shown in Figure 4.

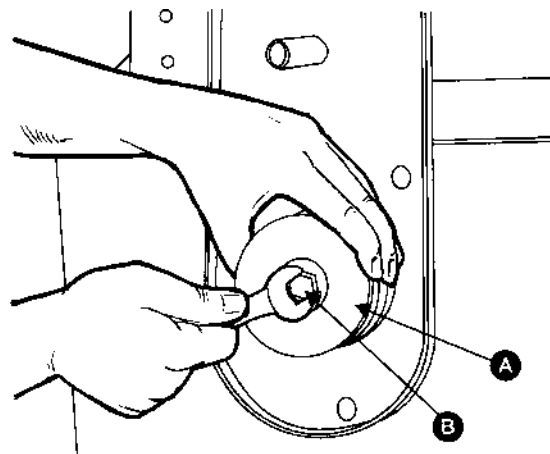
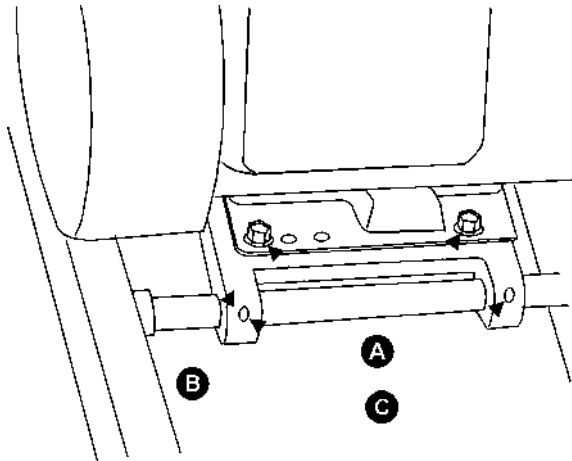


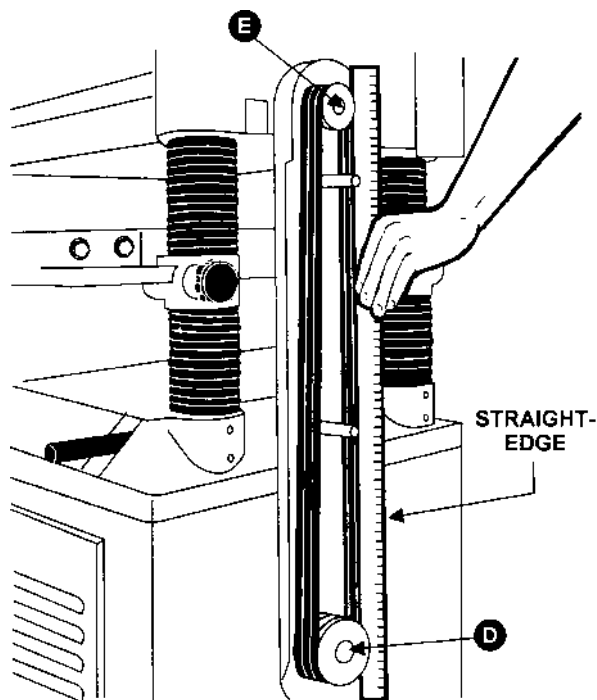
FIGURE 4

2. Assemble the motor to the motor mounting plate (B), using the provided hardware (A), Figure 5.



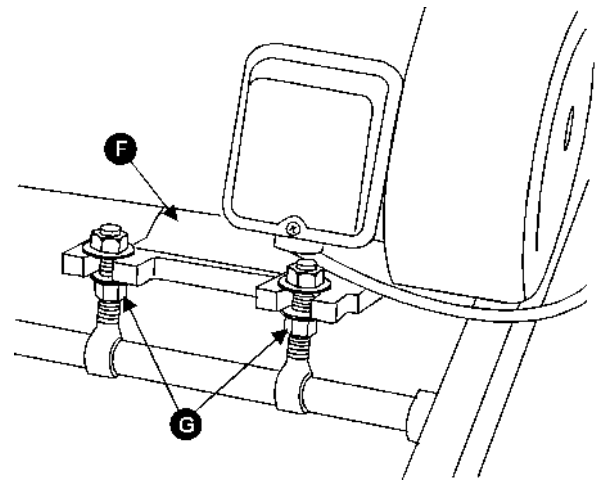
**FIGURE 5**

3. Using a straight edge, align the motor pulley (D) and cutterhead pulley (E) as shown Figure 6. The motor plate can be moved for alignment by loosening the set screws (C) in the motor plate (B) as shown in Figure 5.

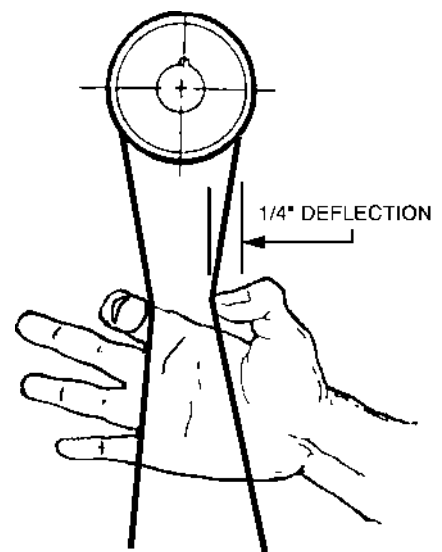


**FIGURE 6**

4. Assemble the belts to the two pulleys, Figure 6. Adjust for the proper belt tension by raising or lowering the motor plate (F), Figure 7, then tighten the nuts (G). Proper tension is obtained when there is approximately 1/4" deflection of the center span of the pulleys by using light finger pressure, Figure 8.



**FIGURE 7**



**FIGURE 8**

## ADJUSTMENTS

### TABLE ROLLER ADJUSTMENT

Your planer is supplied with two table rollers (A), Figure 9, which turn as the stock is fed into the planer, thus reducing friction. It is not possible to give exact dimensions on the proper height setting of the table rollers because each type of wood behaves differently.

As a general rule, however, when planing rough stock, the table rollers should be set at high position. When planing smooth stock the rollers should be set at low position.

NOTE: When raising the roller higher above the table, the range is from .003" to .006", see Figure 10.

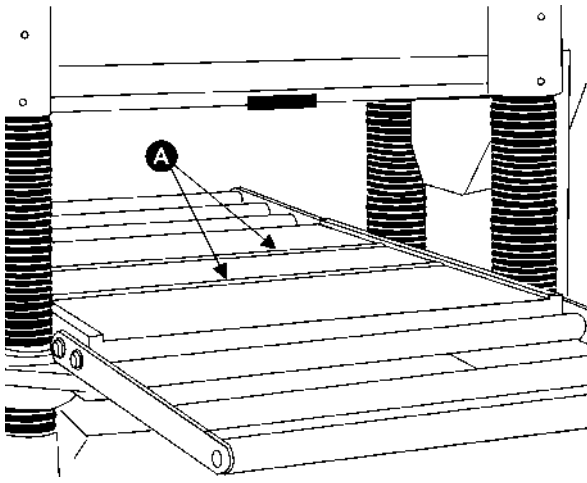


FIGURE 9

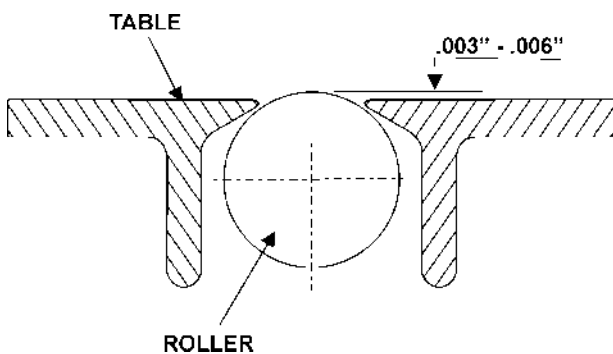


FIGURE 10

The table rollers are factory set for average planing and are parallel to the table surface. If you desire to adjust the table rollers higher or lower, proceed as follows:

1. Disconnect machine from power source.
2. Lay a straight edge (B), Figure 11, across both rollers.
3. On one side of the table, loosen the screws (C) with an Allen wrench, and turn the eccentric shafts (D) to raise or lower the rollers.
4. When the proper height is achieved, tighten screws (C).
5. Adjust the rollers from the opposite side of the table in the same manner.

**IMPORTANT:** Be sure that the height of front and rear rollers are the same. The table rollers must always be set parallel to the table.

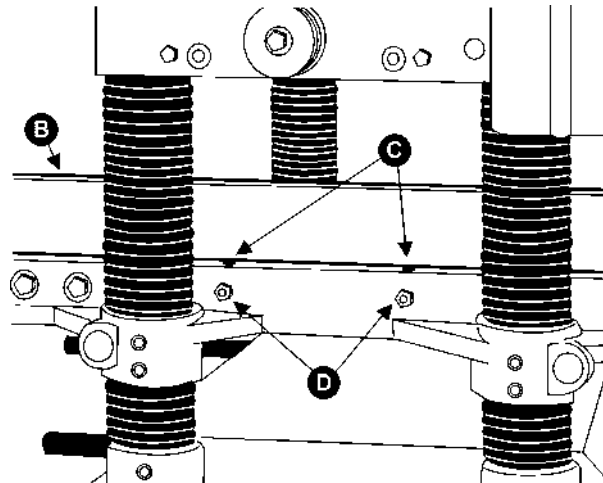


FIGURE 11

## ADJUSTING TABLE EXTENSION ROLLERS

Place a straight edge over the extension rollers and the table, as shown in Figure 12, to make sure the extension rollers and the table are at the same height.

If necessary, adjust the table extension rollers as follows:

1. Loosen the screws and washers (A) to move the table extension roller to the proper position, then retighten the screws.
2. Adjust both front and rear extension rollers in the same manner.

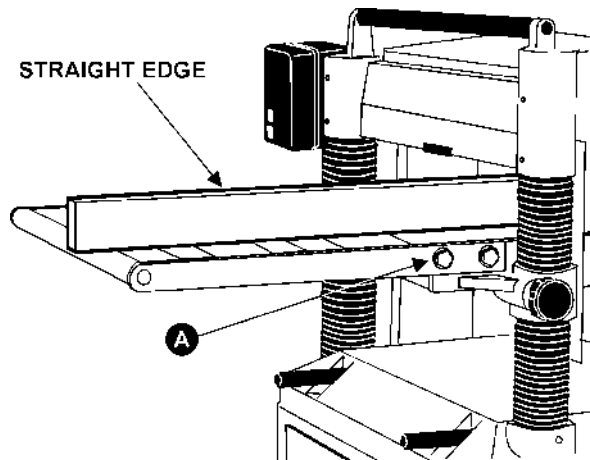


FIGURE 12

## ADJUSTING DEPTH OF CUT

The cutting depth scale is a combination inch/metric scale (A), Figure 13, with a cutting range from 0 to 8" (204mm). The distance of upward or downward movement is controlled by the handwheel (B). One revolution is .059" (1.5mm). Before



moving the table up or down, loosen the lock nuts (C). After obtaining the proper table position, tighten the lock nuts (C).

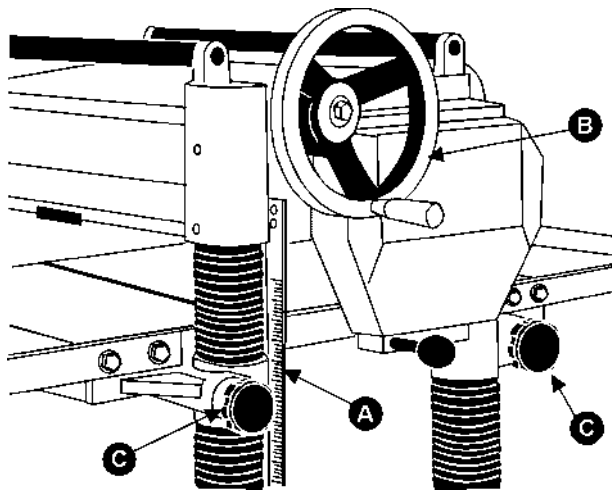


FIGURE 13

## CUTTERHEAD ADJUSTMENT

Although your planer was carefully adjusted at the factory, it should be checked before being put into operation. Any inaccuracies due to rough handling in transit can easily be corrected by following these directions.

To check the adjustments you will need a straight edge, feeler gauge, and a home-made gauge block made of hardwood. This gauge block can be made by following the dimensions shown in Figure 14.

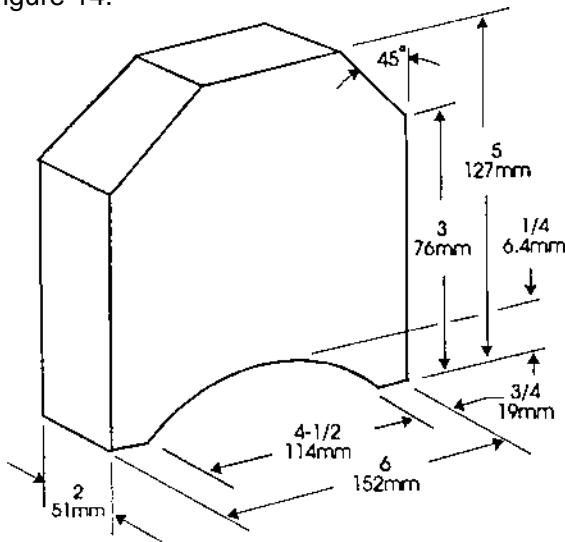


FIGURE 14

## KNIFE ADJUSTMENT

When checking or adjusting the cutterhead knives, proceed as follows:

1. Disconnect machine from power source.
2. Remove the six screws (A) and remove upper cover (B), Figure 15.

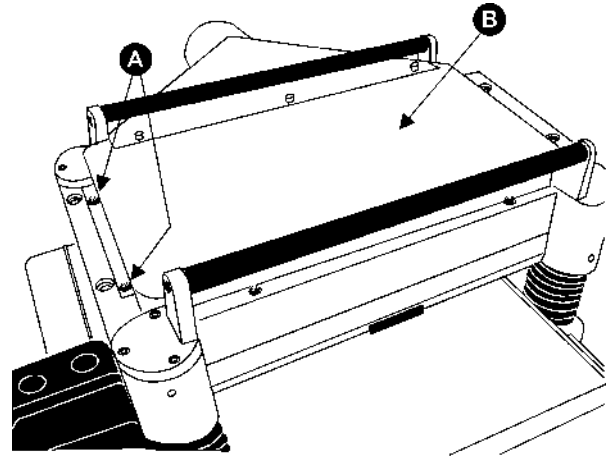


FIGURE 15

3. To check and adjust knives, use the provided knife gauge (C) and check all four knives, Figure 16. Knives should just contact the bottom of the center protrusion (D) of the knife gauge.

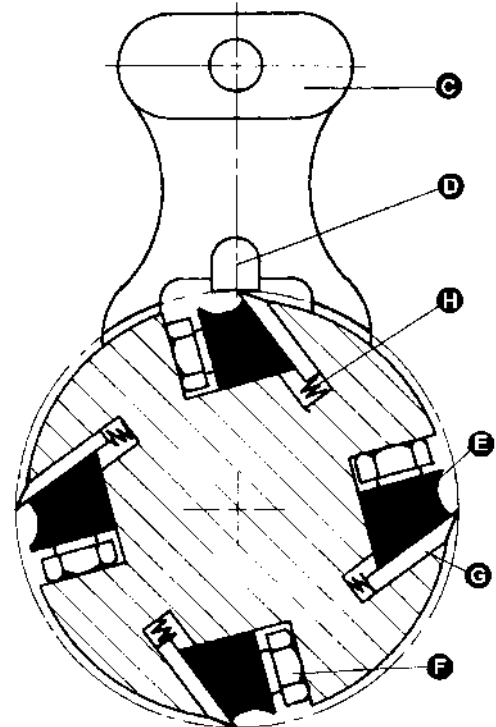


FIGURE 16

4. If an adjustment to one or more of the knives is necessary, slightly loosen the knife gib (E), Figure 16, by turning the six locking screws

(F) into the gib. Turn the screws just enough to relieve stress in the cutterhead without disturbing the setting of the knives. Do this for all four knives at the same time.

5. With the gauge in place over a knife (G), continue to loosen the locking screws (F) until the lifter springs (H), begin raising the knife. When knife comes into contact with the center protrusion (D) of the gauge, snug up the gib by lightly backing out the six locking screws (F) against the slot. **NOTE:** At this time, only tighten the knife into the slot just enough to hold knife in position.

6. If additional knives must be reset, repeat step 5.

7. After all four knives are set with screws just snug, back out and tighten the six locking screws (F), Figures 16 & 17, against the slot starting with the end screws first, then the center screws, until the knife is securely held in the cutterhead. Tighten remaining three knives in the same manner.

**IMPORTANT:** Double check all screws for tightness.

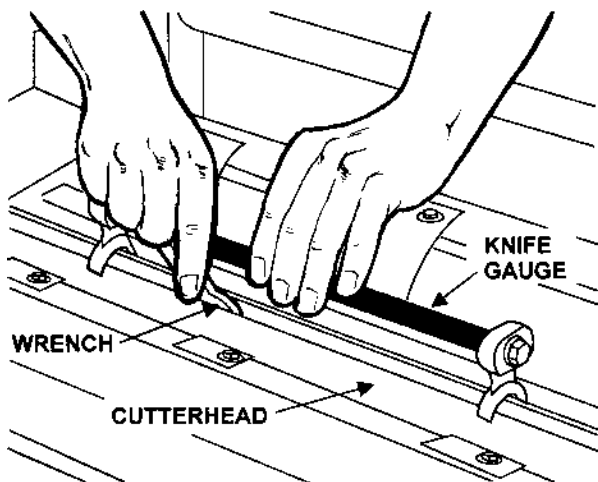


FIGURE 17

## REPLACING & RESETTING KNIVES

If the knives are removed for sharpening, care must be exercised in replacing and resetting them. Proceed as follows:

1. Disconnect machine from power source.
2. Remove six screws and upper cover (see Figure 15).
3. To remove knife, loosen the gib (E), Figure 16, by turning the six locking screws (F) into the gib. Remove gib (E), knife (G), and springs (H). **NOTE:** The inner two springs will pop out when the knife and gib are removed.
4. Remove the remaining three knives in the

same manner.

5. Thoroughly clean the knife slots, gibs, springs and locking screws. Check the locking screws; if the threads appear worn or stripped or if the heads are becoming rounded, replace them.

6. Inspect the cutting edge of the knives for nicks or wire edge. Hone the knives slightly using a stone or if the knives are to be sharpened, maintain a cutting angle of 35 degrees as shown in Figure 16.

7. Insert springs (H), knives (G) and gib (E) into slot of cutterhead. Back out locking screws (F) just enough to hold the knife in the cutterhead.

8. Place knife gauge (C) over knife as shown in Figure 16.

9. While holding down on the knife gauge, loosen all six locking screws (F) by turning them into the gib (E) until cutting edge of knife comes into contact with the protrusion (D) of the gauge. Snug up the gib by slightly backing out the six locking screws against the slot.

**NOTE:** At this time, only tighten the knife into the slot just enough to hold the knife in position.

10. Replace and reset the other three knives in the same manner.

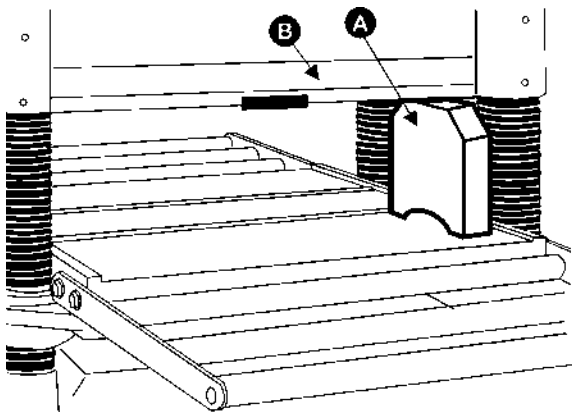
11. After all four knives are set with the screws just snug, back out and tighten the six screws (F) against the slot starting with the end screws first and then the center screws until the knife is securely held in the cutterhead. Tighten the remaining three knives in the same manner.

**⚠ WARNING:** AFTER REPLACING AND CHECKING KNIVES, CHECK AGAIN CAREFULLY. MAKE CERTAIN THE DIRECTION OF KNIVES IS CORRECT AND ALL 24 LOCKING SCREWS ARE TIGHTENED SECURELY!

## CHECKING WORKING TABLE PARALLEL TO CUTTERHEAD

The working table is set parallel to the cutterhead at the factory and no further adjustment should be necessary. If your machine is planing a taper, first check to see if the knives are set properly in the cutterhead. Then check to see if the working table is set parallel to the cutterhead. Proceed as follows:

1. Disconnect machine from power source.
2. Place the gauge block (A), Figure 18, on the working table directly under front edge of head casting (B). Make slight contact by gently raising table.



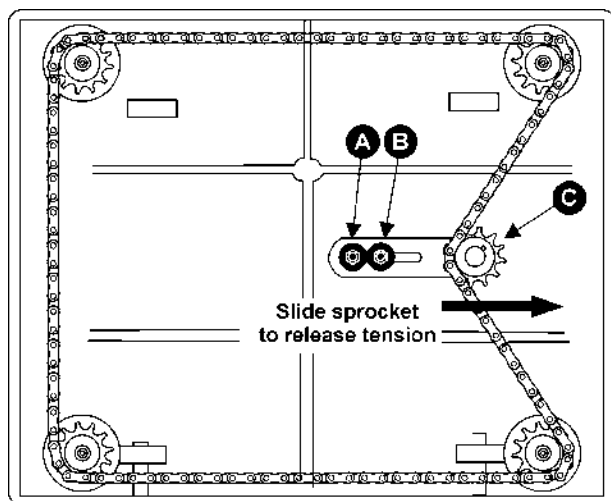
**FIGURE 18**

3. Move the gauge block to opposite end of the working table. NOTE: Distance from the working table to edge of the head casting should be the same.
4. Adjust opposite end in the same manner.

### ADJUSTING WORKING TABLE PARALLEL TO CUTTERHEAD

If the working table is not parallel to the cutterhead, perform the adjustment procedures as follows:

1. Disconnect the machine from power source.
2. Tilt planer on its side to expose underside of base, as shown in Figure 19.
3. Remove bolt (A) and loosen bolt (B) which will allow you to move the idler sprocket assembly (C) far enough to release tension on the chain, as shown in Figure 19.



**FIGURE 19**

4. Remove chain from the particular sprocket on corner of base that must be adjusted.
5. Turn the sprocket by hand to bring that corner into adjustment with the other three cor-

ners.

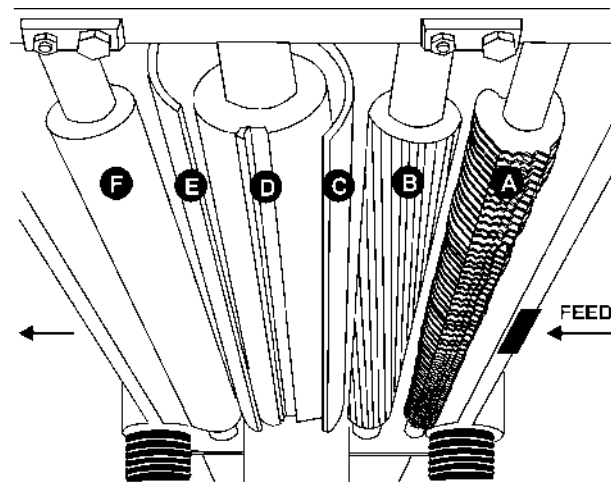
NOTE: Turning sprocket clockwise will increase the distance between the working table and headcasting; counter-clockwise will decrease the distance. This adjustment is very sensitive and it should not be necessary to turn the sprocket more than one or two teeth.

6. When adjustments are correct, replace chain around corner sprocket, slide sprocket (C) back to re-tension chain, tighten bolt (B) and replace and tighten bolt (A).

### KNOW THE TRANSMITTING ROLLERS OF YOUR PLANER

- A. Anti-Kickback Fingers
- B. Infeed Roller
- C. Chipbreaker
- D. Cutterhead
- E. Pressure Bar
- F. Outfeed Roller

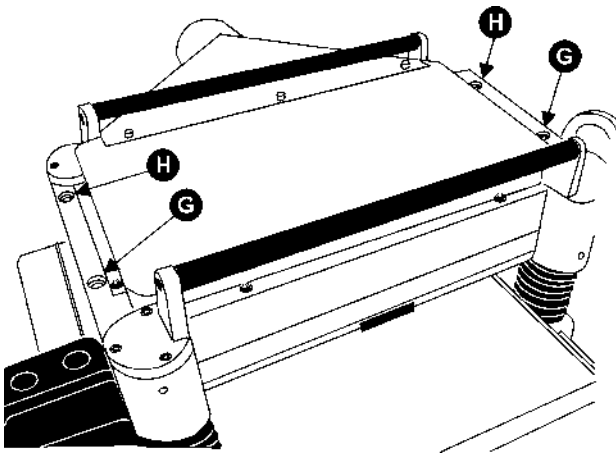
The infeed roller (B) and outfeed roller (F), Figure 20, are those parts of your planer that feed the stock while it is being planed. The infeed roller and the outfeed roller are under spring tension and this tension must be sufficient to feed the stock uniformly through the planer without slipping but should not be so tight that it causes damage to the board. The tension should be equal at both ends of each roller.



**FIGURE 20**

### ADJUSTING INFEEED & OUTFEED ROLLER SPRING TENSION

To adjust the spring tension of the infeed and outfeed rollers, turn screws (G & H) with an Allen wrench, Figure 21. Turn screws on opposite end of infeed/outfeed rollers in the same manner.



**FIGURE 21**

## ANTI-KICKBACK FINGERS

The anti-kickback fingers (A), Figure 20, are provided on your planer to prevent kickback of stock. They operate by gravity and it is necessary to inspect them occasionally to make sure they are free of gum and pitch, so that they move independently and operate correctly.

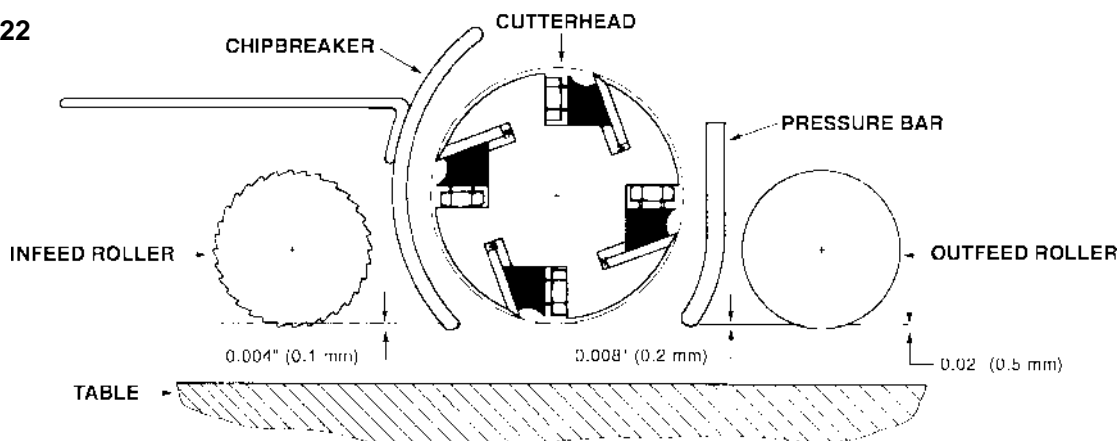
## HEIGHT OF INFEED ROLLER, CHIP-BREAKER, PRESSURE BAR & OUTFEED ROLLER

The infeed roller, chipbreaker, pressure bar and outfeed roller are adjusted at the factory. The infeed roller and the chipbreaker should be set at 0.004" (0.1mm) below the cutting circle; the pressure bar should be set at 0.008" (.02mm) below the cutting circle; and the outfeed roller should be set at 0.02" (0.5mm) below the cutting circle. See Figure 22.

If an adjustment to the infeed roller, chipbreaker, pressure bar or outfeed roller is necessary, use the following steps as an example of procedure.

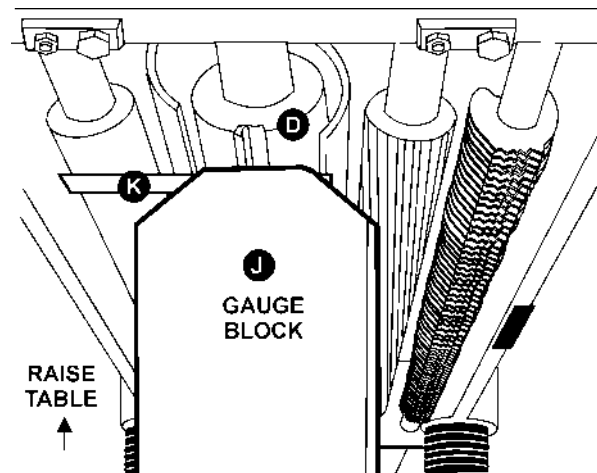
### CUTTING - ROLLER ASSEMBLY (SIDE VIEW)

**FIGURE 22**



To check and adjust the outfeed roller below the cutting circle, proceed as follows:

1. Disconnect machine from power source.
2. Make sure the knives are adjusted properly as previously explained under "Checking & Adjusting of Knives."
3. Place the gauge block (J) on the table directly underneath the cutterhead (D), Figure 23. Using a 0.02" (0.5mm) feeler gauge (K) placed on top of the gauge block, raise the working table until the knife just touches the feeler gauge when the knife is at its lowest point. Do not move the working table any further until the outfeed roller is adjusted.



**FIGURE 23**

4. Move the gauge block (J) under one end of the outfeed roller (F), Figure 24. The bottom of the outfeed roller should just touch the top of the gauge block. If an adjustment to the outfeed roller is necessary, loosen the lock nut (L) and turn screw (M) until the outfeed roller just touches the gauge block. Then tighten lock nut (L).
5. Check and adjust opposite end of the outfeed roller in the same manner.

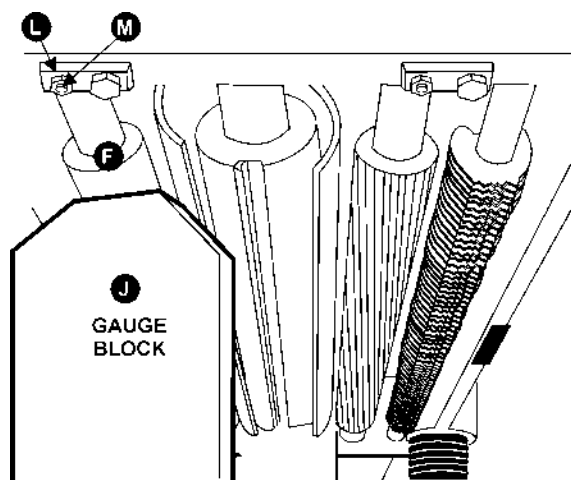


FIGURE 24

## FEED SPEED CONTROL

Your machine is equipped with a spiral, serrated infeed roller and a solid steel outfeed roller. When the feed rollers are engaged, they turn to feed the stock. The feed rollers slow automatically when the machine is under heavy load for best planing in all conditions. The feed rollers are driven by chains (A), Figure 25, and the sprockets (B) which take power directly from the cutterhead through the oil bath gear box (C).

The gear box has two feed speeds. These are set by pulling out or pushing in the shift lever (D) while the machine is running. The feed speed range is shown in Figure 26.

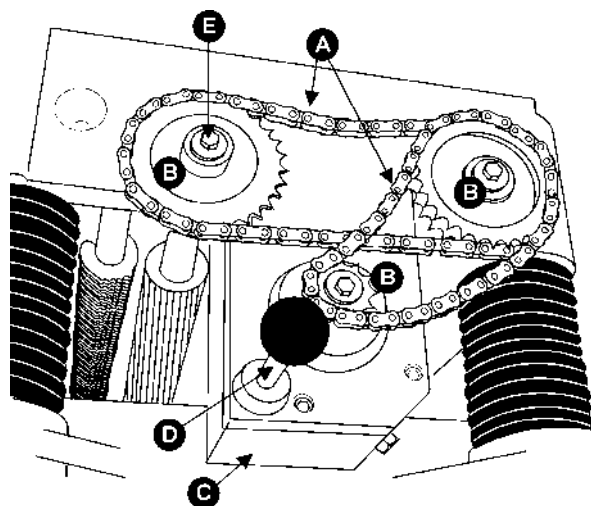


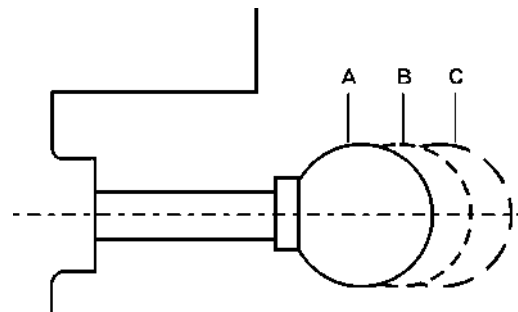
FIGURE 25

## CHANGING ACCESSORIES FOR LOWEST FEED SPEED

The lowest feed speed for your planer (16.2 fpm & 20.7 fpm) can be obtained by replacing the lower (gear shaft) sprocket and the chain, Figure 26. To

change the sprocket and the chain on your machine, proceed as follows:

1. Disconnect machine from power source.
2. Remove the three hex hd screws (E) and washers, Figure 25.
3. Remove the three sprockets (B) from the infeed roller, outfeed roller and the gear shaft at the same time.
4. When sprockets (B) are removed, replace the lower sprocket which will be assembled on the gear shaft.
5. Assemble the three sprockets and chains to the shafts, and tighten the hex hd. screws (E).



| FPM<br>A/C | CHAIN<br>(F) | SPROCKET<br>(G) |
|------------|--------------|-----------------|
| 20/16      | 50P          | 12T             |
| 31/24      | 52P          | 18T             |

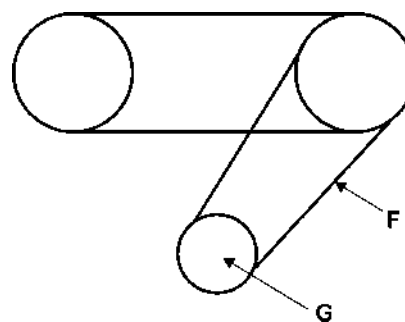


FIGURE 26

## RETURN ROLLERS

The two return rollers on the top of the machine serve as a convenient rest for stock. They save time and motion for the operator as the stock is returned to the infeed side.

## DUST COLLECTOR HOOD

The dust collector hood comes standard with the model 208 planer, and helps maintain a clean and safe work area. It is assembled to the planer with hex head screws and washers.

# MAINTENANCE

## Lubrication Guide for Model 208, 20" Planer

| No. | Position   | Interval                            | Suitable Types of Oil  | Fig. No. |
|-----|------------|-------------------------------------|--|----------|
| 1   | Chain      | Frequently                          | Grease   | 29       |
| 2   | Gear Box   | When operated more than 2,500 hours | HD-100, Mobil Gear 627, Shell Omala 100, ESSO Spartan EP-100 | 29       |
| 3   | Rollers    | Frequently                          | SAE-30   | 30       |
| 4   | Worm Gear  | Frequently                          | Grease   | 31       |
| 5   | Lead Screw | Frequently                          | Grease   | 31       |
| 6   | Column     | Frequently                          | Clean and SAE-30   | 31       |
| 7   | Chain      | Frequently                          | Grease   | 32       |
| 8   | Bushing    | Frequently                          | SAE-30   | 33       |

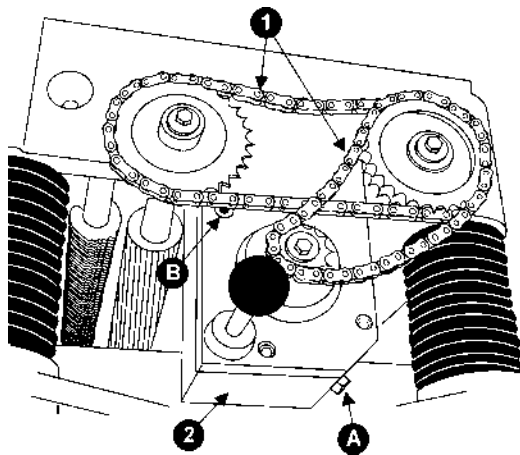


FIGURE 28

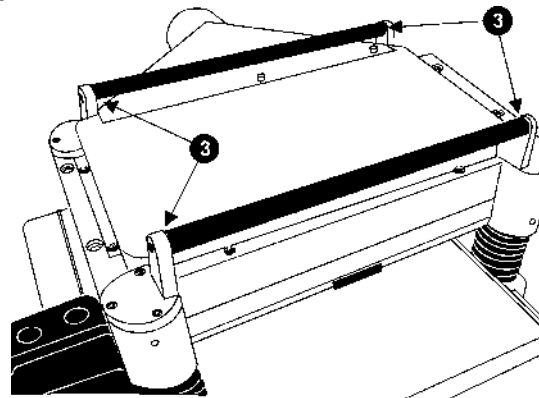


FIGURE 29

FIGURE 30

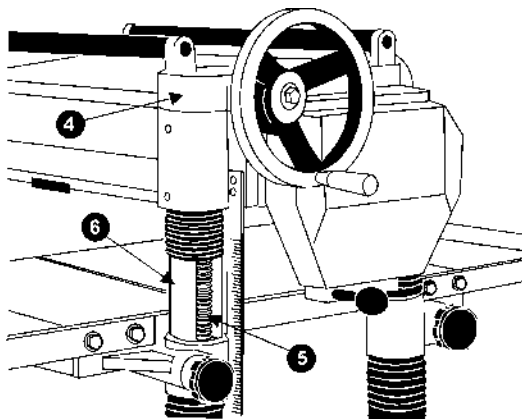


FIGURE 31

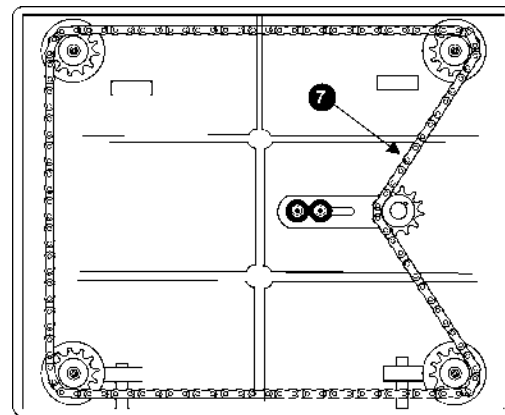


FIGURE 32

## CHANGING GEARBOX LUBRICANT

The lubricant in the gear box must be replaced every 2,500 hours. Multi-purpose gear box lubricant will be suitable.

To replace the gearbox lubricant:

1. Remove the drain plug (A), Figure 29, and filler cap (B). Drain dirty oil thoroughly.
2. Tighten the drain plug (A).
3. Fill with clean lubricant through hole (B).
4. Tighten filler cap (B).

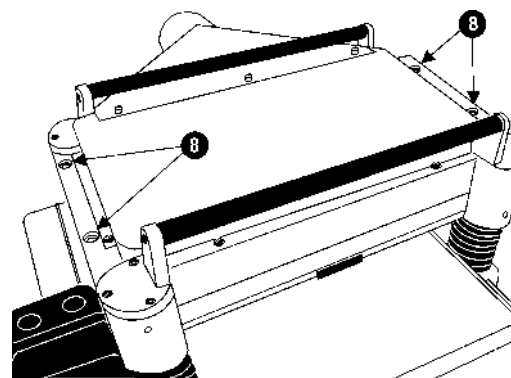
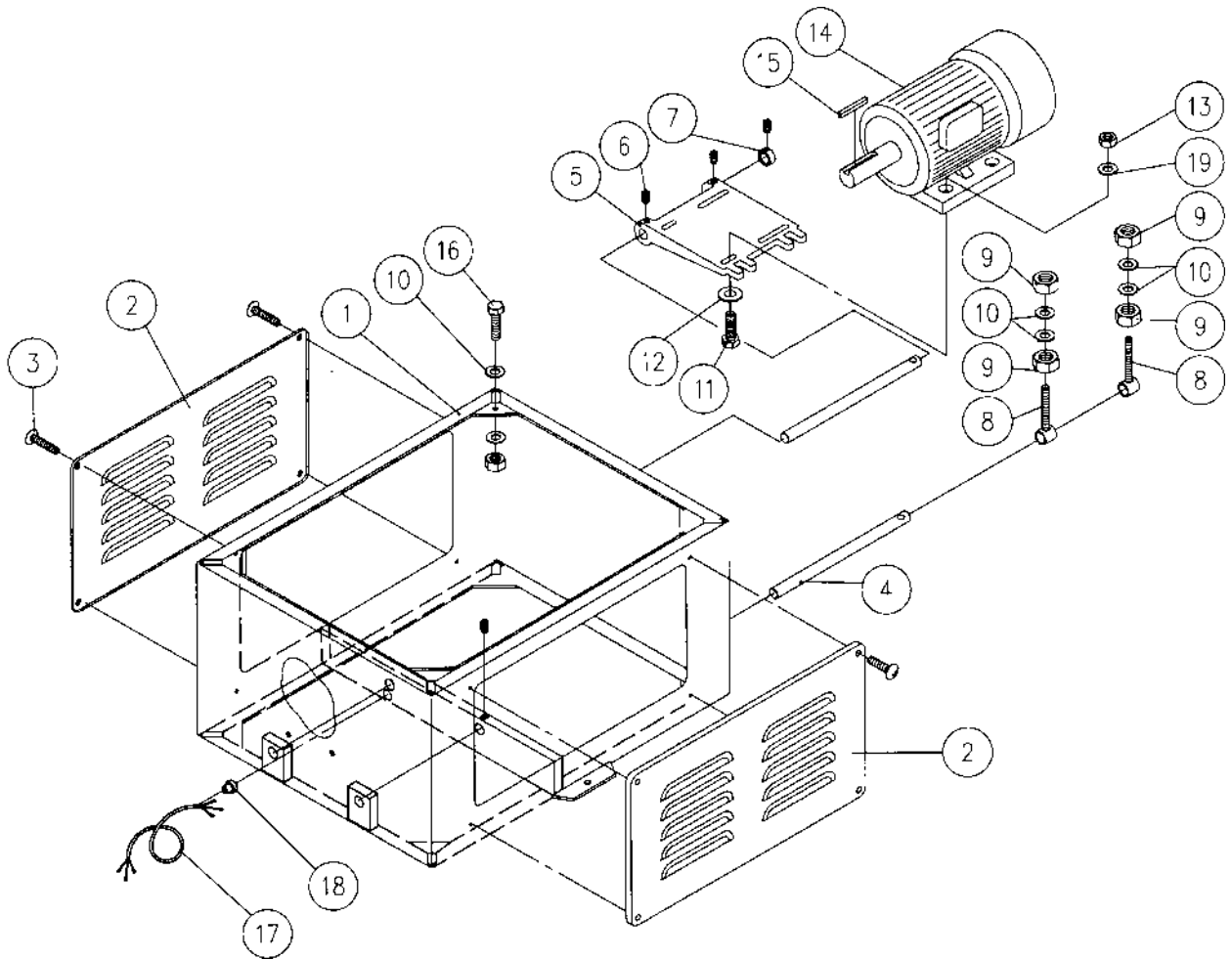


FIGURE 33

## PARTS LIST: **Base Assembly (208 Planer)**

| No. | Part No. | Description                  | No. | Part No. | Description                  |
|-----|----------|------------------------------|-----|----------|------------------------------|
| 1   | 6292793  | Stand                        | 12  | 6292801  | Washer, 5/16                 |
| 2   | 6292794  | Cover                        | 13  | 6292802  | Nut, M8 X 1.25P              |
| 3   | 6292795  | Machine Screw, M6 X 1.0P-20  | 14  | 6292803  | Motor, 3HP 1Ph               |
| 4   | 6292796  | Bar                          |     | 6292824  | Motor, 5HP 3Ph               |
| 5   | 6292797  | Motor Mount                  | 15  | 6292804  | Key                          |
| 6   | 6292711  | Set Screw, M8 X 1.25P-8      | 16  | 6292805  | Hex Head Screw, M12X1.75P-60 |
| 7   | 6292798  | Collar                       | 17  | 6292825  | Power Supply Wire, 3 Ph      |
| 8   | 6292799  | Adjusting Bolt               |     | 6292806  | Power Supply Wire, 1 Ph      |
| 9   | 6292651  | Nut, M12 X 1.75P             | 18  | 6292807  | Relief Bushing               |
| 10  | 6292683  | Washer, 1/2                  | 19  | 6292801  | Washer, 5/16                 |
| 11  | 6292800  | Hex Head Screw M8 X 1.25P-25 |     |          |                              |

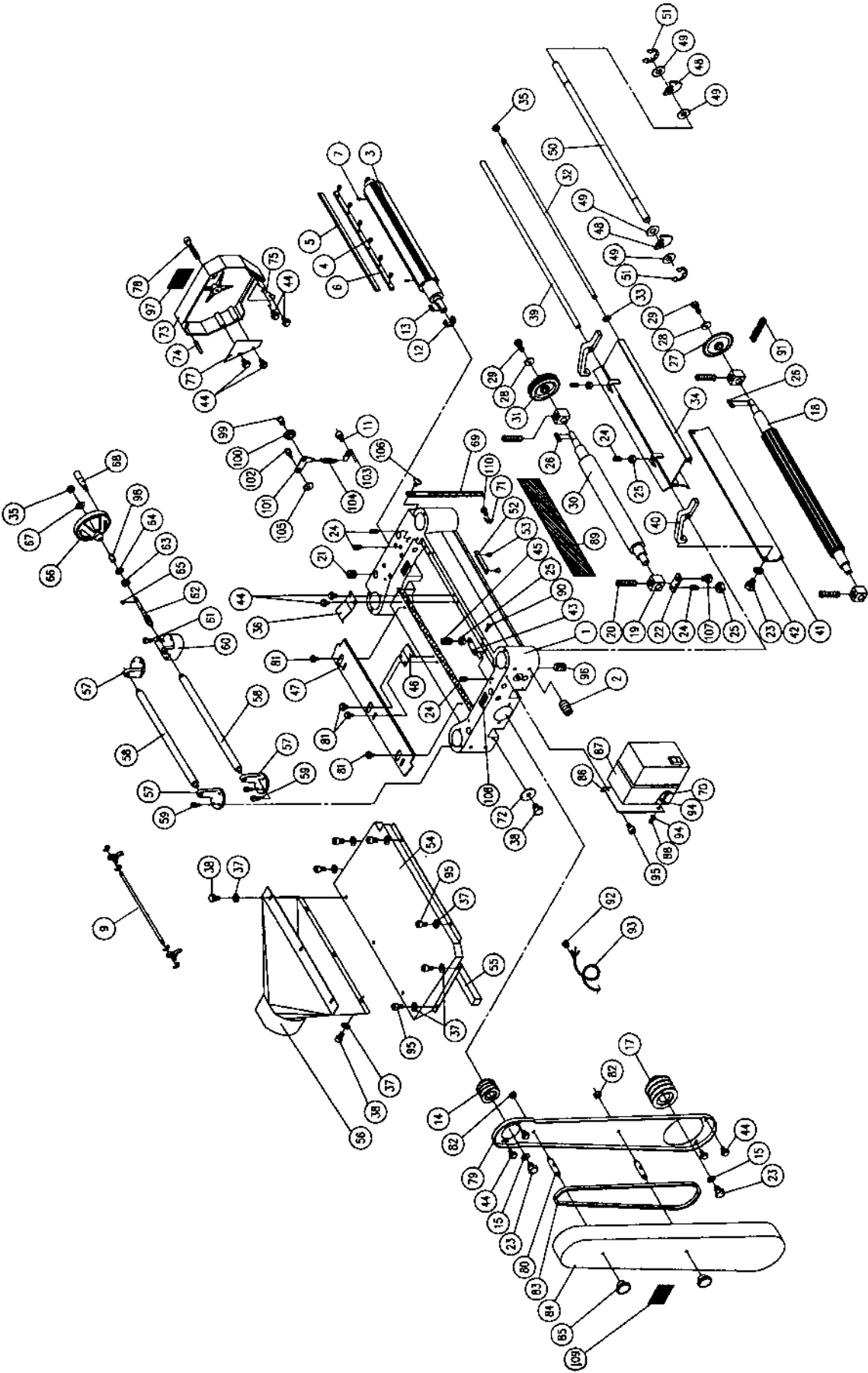


## PARTS LIST: Cutterhead Assembly (208 Planer)

| No. | Part No. | Description                           | No. | Part No. | Description                   |
|-----|----------|---------------------------------------|-----|----------|-------------------------------|
| 1   | 6292617  | Head Casting                          | 58  | 6292674  | Roller                        |
| 2   | 6292618  | Set Screw, M10 X 1.5P-12              | 59  | 6292675  | Cap Screw, M6 X 1.0P-16       |
| 3   | 6292619  | Cutterhead                            | 60  | 6292678  | Gear Box Worm                 |
| 4   | 6292623  | Hex Head Screw, M8 X 1.25P-10         | 61  | 6292677  | Cap Screw, M6 X 1.0P-50       |
| 5   | 6292621  | Single Sided Knives (Set of 4)        | 62  | 6292676  | Worm                          |
| 6   | 6292622  | Knife Locking Bar                     | 63  | 6292679  | Bearing 6201 Z                |
| 7   | 6292620  | Spring                                | 64  | 6292680  | Retaining Ring, RTW-32        |
| 9   | 6292625  | Knife Setting Gauge                   | 65  | 6292681  | Key 4 x 4 x 10                |
| 11  | 6292813  | Cap Screw, M6 X 1.0P-10               | 66  | 6292682  | Handwheel                     |
| 12  | 6292628  | Bearing 6206 ZZ                       | 67  | 6292683  | Washer, 1/2                   |
| 13  | 6292629  | Key, 8 X 8 X 36                       | 68  | 6292684  | Handle                        |
| 14  | 6292630  | Machine Pulley                        | 69  | 6292685  | Scale                         |
| 15  | 6292631  | Washer, 8 X 30 X 3                    | 70  | 6292686  | Machine Screw, M5 X 0.8P X 10 |
| 16  | 6292632  | Set Screw, M6 X 1.0P-25               | 71  | 6292687  | Cut Limit Pointer             |
| 17  | 6292633  | Motor Pulley                          | 72  | 6292814  | Flat Washer                   |
| 18  | 6292634  | Infeed Roller                         | 73  | 6292689  | Cover                         |
| 19  | 6292635  | Bushing                               | 74  | 6292690  | Spring Pin                    |
| 20  | 6292636  | Spring                                | 75  | 6292691  | Safety Hatch                  |
| 21  | 6292637  | Screw, M22 X 1.5P-20                  | 77  | 6292693  | Safety Hatch                  |
| 22  | 6292638  | Plate                                 | 78  | 6292694  | Cap Screw, M8 X 1.25P-40      |
| 23  | 6292639  | Hex Head Screw, M8 X 1.25P-20         | 79  | 6292695  | Pulley Guard                  |
| 24  | 6292640  | Set Screw, M6 X 1.0P-16               | 80  | 6292696  | Bolt                          |
| 25  | 6292641  | Nut, M6 X 1.0P                        | 81  | 6292815  | Hex Head Screw, M6X1.0P-16    |
| 26  | 6292642  | Key, 5 X 5 X 23                       | 82  | 6292698  | Nut, 5/16-18NC                |
| 27  | 6292643  | Sprocket 31T                          | 83  | 6292699  | Belt                          |
| 28  | 6292644  | Washer, 6.2 X 22 X 3                  | 84  | 6292700  | Pulley Cover                  |
| 29  | 6292645  | Hex Head Screw, M6 X 1.0P-16          | 85  | 6292710  | Knob, 5/16-18NC               |
| 30  | 6292646  | Outfeed Roller                        | 86  | 6292701  | Switch Board                  |
| 31  | 6292647  | Sprocket                              | 87  | 6816292  | Switch, 3 HP, 1 PH            |
| 32  | 6292648  | Locking Bolt                          |     | 6816295  | Switch, 5 HP, 3 PH            |
| 33  | 6292649  | Retaining Ring STW-12                 |     | 6816296  | Switch, 5 HP, 3 Ph, 460V      |
| 34  | 6292650  | Chip Breaker                          | 88  | 6292703  | Nut, M5 X 0.8P                |
| 35  | 6292651  | Nut, M12 X 1.75P                      | 89  | 6292704  | Name Plate                    |
| 36  | 6292652  | Plate Spring                          | 90  | 6292705  | Rivet                         |
| 37  | 6292653  | Washer, 1/4                           | 91  | 6292706  | Chain 06B                     |
| 38  | 6292654  | Hex Head Screw, M6 X 1.0P-12          | 92  | 6292707  | Relief Bushing                |
| 39  | 6292655  | Shaft                                 | 93  | 6292708  | Power Supply Wire, 1 Ph       |
| 40  | 6292656  | Bracket                               |     | 6292826  | Power Supply Wire, 3 Ph       |
| 41  | 6292657  | Pressure Plate                        | 94  | 6292709  | Tooth Washer, EOW-5           |
| 42  | 6292658  | Spring Washer                         | 95  | 6292813  | Cap Screw, M6 X 1.0P-10       |
| 43  | 6292659  | Shaft                                 | 96  | 6292711  | Cap Screw, M8 X 1.25P-8       |
| 44  | 6292660  | Set Screw, M6 X 1.0P-12               | 97  | 6292816  | Label                         |
| 45  | 6292661  | Set Screw, M6 X 1.0P-20               | 98  | 6292713  | Collar                        |
| 46  | 6292662  | Plate Spring, 0.6                     | 99  | 6292714  | Shaft                         |
| 47  | 6292663  | Chip Deflector Plate                  | 100 | 6292715  | Idle Pulley                   |
| 48  | 6292664  | Anti-kickback Finger                  | 101 | 6292716  | Bracket                       |
| 49  | 6292665  | Collar                                | 102 | 6292717  | Shaft                         |
| 50  | 6292666  | Shaft                                 | 103 | 6292718  | Hanger                        |
| 51  | 6292667  | Retaining Ring                        | 104 | 6292719  | Spring                        |
| 52  | 6292668  | Cut Limiter Plate                     | 105 | 6292720  | Collar                        |
| 53  | 6292669  | Flat Head Machine Screw, M5 X 0.8P-12 | 106 | 6292817  | Round Head Screw, M6X1.0P-12  |
| 54  | 6292670  | Upper Cover                           | 107 | 6292818  | Hex Head Screw, M8X1.25P-18   |
| 55  | 6292671  | Gasket                                | 108 | 6292819  | Label                         |
| 56  | 6292672  | Dust Hood                             | 109 | 6292820  | Label                         |
| 57  | 6292673  | Roller Stand                          | 110 | 6292821  | Cap Screw, M5X0.8P-10         |

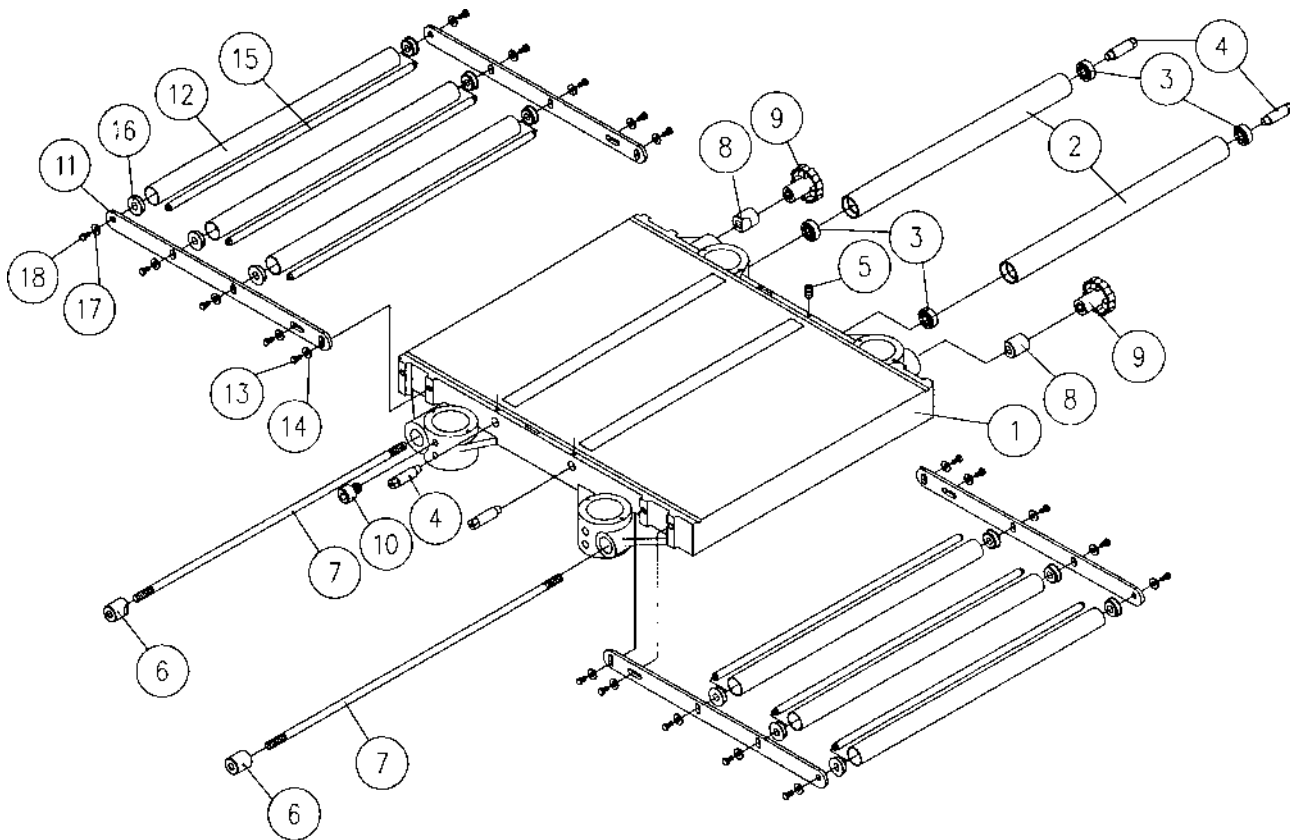


EXPLODED VIEW:    **Cutterhead Assembly (208 Planer)**



## PARTS LIST: **Table Assembly (208 Planer)**

| No. | Part No. | Description             | No. | Part No. | Description                   |
|-----|----------|-------------------------|-----|----------|-------------------------------|
| 1   | 6292721  | Middle Table            | 11  | 6292730  | Roller Frame                  |
| 2   | 6292722  | Roll                    | 12  | 6292731  | Roller                        |
| 3   | 6292679  | Bearing 6201 Z          | 13  | 6292732  | Hex Head Screw, M10 X 1.5P-25 |
| 4   | 6292724  | Eccentric Shaft         | 14  | 6292626  | Washer, 3/8                   |
| 5   | 6292660  | Set Screw, M6 X 1.0P-12 | 15  | 6292808  | Shaft                         |
| 6   | 6292725  | Lock Bar                | 16  | 6292809  | Bushing                       |
| 7   | 6292726  | Locking Bolt            | 17  | 6292811  | Washer                        |
| 8   | 6292727  | Locksmith               | 18  | 6292810  | Hex Head Screw, M6X1.0P-12    |
| 9   | 6292728  | Knob                    |     |          |                               |
| 10  | 6292729  | Cap Screw M8 X 1.25P-20 |     |          |                               |



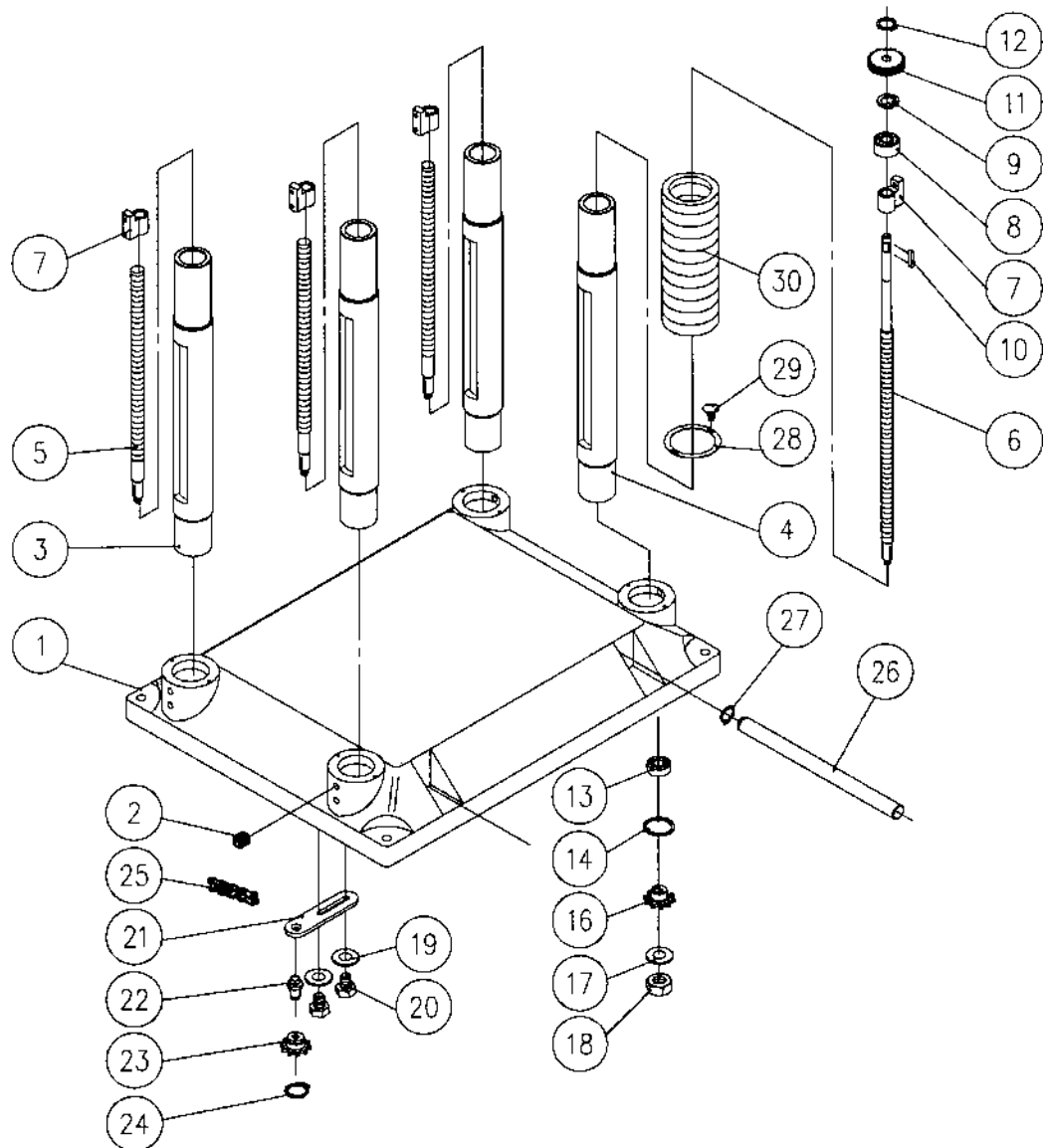
## PARTS LIST: Table Base Assembly (208 Planer)

### NO. PART NO. DESCRIPTION

|    |         |                          |
|----|---------|--------------------------|
| 1  | 6292733 | BASE                     |
| 2  | 6292618 | SCREW, SET M10 X 1.5P-12 |
| 3  | 6292734 | COLUMN                   |
| 4  | 6292735 | COLUMN                   |
| 5  | 6292736 | SCREW, LEAD              |
| 6  | 6292737 | SCREW, LEAD              |
| 7  | 6292738 | NUT                      |
| 8  | 6292739 | BUSHING                  |
| 9  | 6292740 | RING, RETAINING RTW-38   |
| 10 | 6292741 | KEY 4 X 4 X 10           |
| 11 | 6292742 | GEAR, 24T                |
| 12 | 6292649 | RING, RETAINING STW-12   |
| 13 | 6285855 | BEARING 6202 ZZ          |
| 14 | 6292744 | RING, RETAINING RTW-35   |
| 16 | 6292746 | SPROCKET 10T             |

### NO. PART NO. DESCRIPTION

|    |         |                                |
|----|---------|--------------------------------|
| 17 | 6292626 | WASHER, 3/8 X 20 X 2           |
| 18 | 6292627 | NUT, M10 X 1.25P               |
| 19 | 6292747 | WASHER 8.2 X 22 X 3            |
| 20 | 6292748 | SCREW, HEX. HD. M18 X 1.25P-25 |
| 21 | 6292749 | BRACKET                        |
| 22 | 6292750 | SHAFT                          |
| 23 | 6292751 | SPROCKET 10T                   |
| 24 | 6292752 | RING, RETAINING STW-15         |
| 25 | 6292753 | CHAIN #40                      |
| 26 | 6292754 | POST, CRANE                    |
| 27 | 6292755 | RING, RETAINING ETW-19         |
| 28 | 6292756 | BAND, PIPE                     |
| 29 | 6292757 | SCREW, MACHINE M5 X 0.8P-8     |
| 30 | 6292758 | BEND, EXPANSION                |



## PARTS LIST: **Gearbox Assembly (208 Planer)**

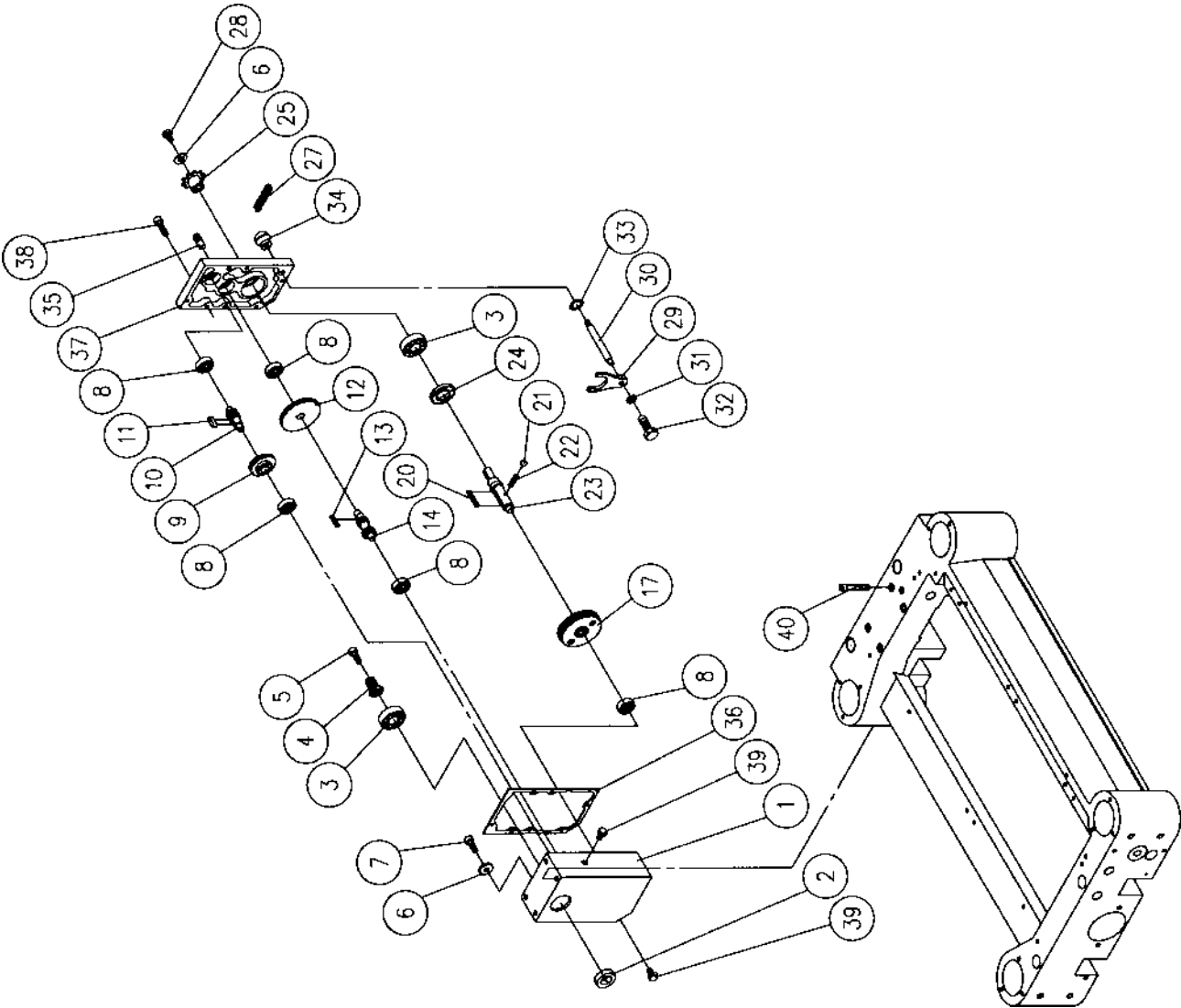
### NO. PART NO. DESCRIPTION

|    |         |                         |
|----|---------|-------------------------|
| 1  | 6292759 | Gear Box                |
| 2  | 6292760 | Oil Seal                |
| 3  | 6292761 | Bearing, 6204ZZ         |
| 4  | 6292762 | Gear 16T                |
| 5  | 6292763 | Cap Screw, M6 X 1.0P-20 |
| 6  | 6292764 | Washer                  |
| 7  | 6292675 | Cap Screw, M6 X 1.0-16  |
| 8  | 6292765 | Bearing 6201            |
| 9  | 6292766 | Gear 47T                |
| 10 | 6292767 | Shaft 18T               |
| 11 | 6292768 | Key 5 X 5 X 12          |
| 12 | 6292769 | Gear 71T                |
| 13 | 6292770 | Key 5 X 5 X 10          |
| 14 | 6292771 | Shaft 18T               |
| 17 | 6292772 | Gear Assembly           |
| 19 | 6292813 | Cap Screw, M6 X 1.0-10  |
| 20 | 6292774 | Key 6 X 6 X 40          |
| 21 | 6292775 | Ball, 6 Diameter        |
| 22 | 6292776 | Spring                  |

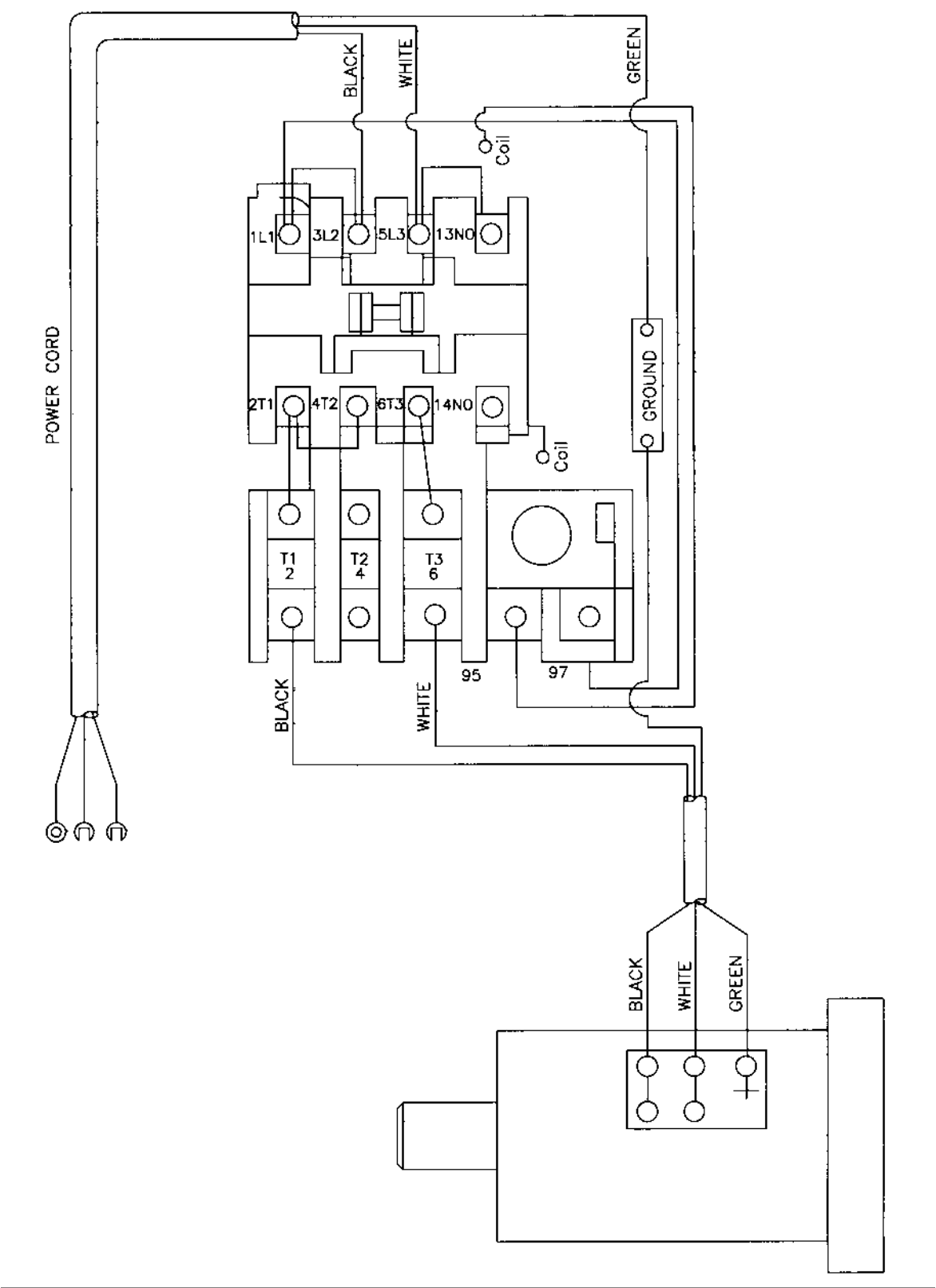
### NO. PART NO. DESCRIPTION

|    |         |                              |
|----|---------|------------------------------|
| 23 | 6292777 | Shaft                        |
| 24 | 6292778 | Oil Seal SC25 X 47 X 6       |
| 25 | 6292791 | Sprocket 18T                 |
|    | 6292779 | Sprocket 12T                 |
| 27 | 6292792 | Chain 06B X 52P              |
|    | 6292780 | Chain 06B X 50P              |
| 28 | 6292654 | Hex Head Screw, M6 X 1.0P-12 |
| 29 | 6292781 | Clutch                       |
| 30 | 6292782 | Handle                       |
| 31 | 6292653 | Washer, 1/4                  |
| 32 | 6292654 | Hex Head Screw, M6 X 1.0P-12 |
| 33 | 6292783 | Oil Ring P-12                |
| 34 | 6292784 | Knob                         |
| 35 | 6292785 | Pin                          |
| 36 | 6292786 | Packing Piece                |
| 37 | 6292787 | Cover                        |
| 38 | 6292788 | Cap Screw, M6 X 1.0P-25      |
| 39 | 6292789 | Oil Plug, PT1/4-19           |
| 40 | 6292790 | Cap Screw, M8 X 1.25P-50     |

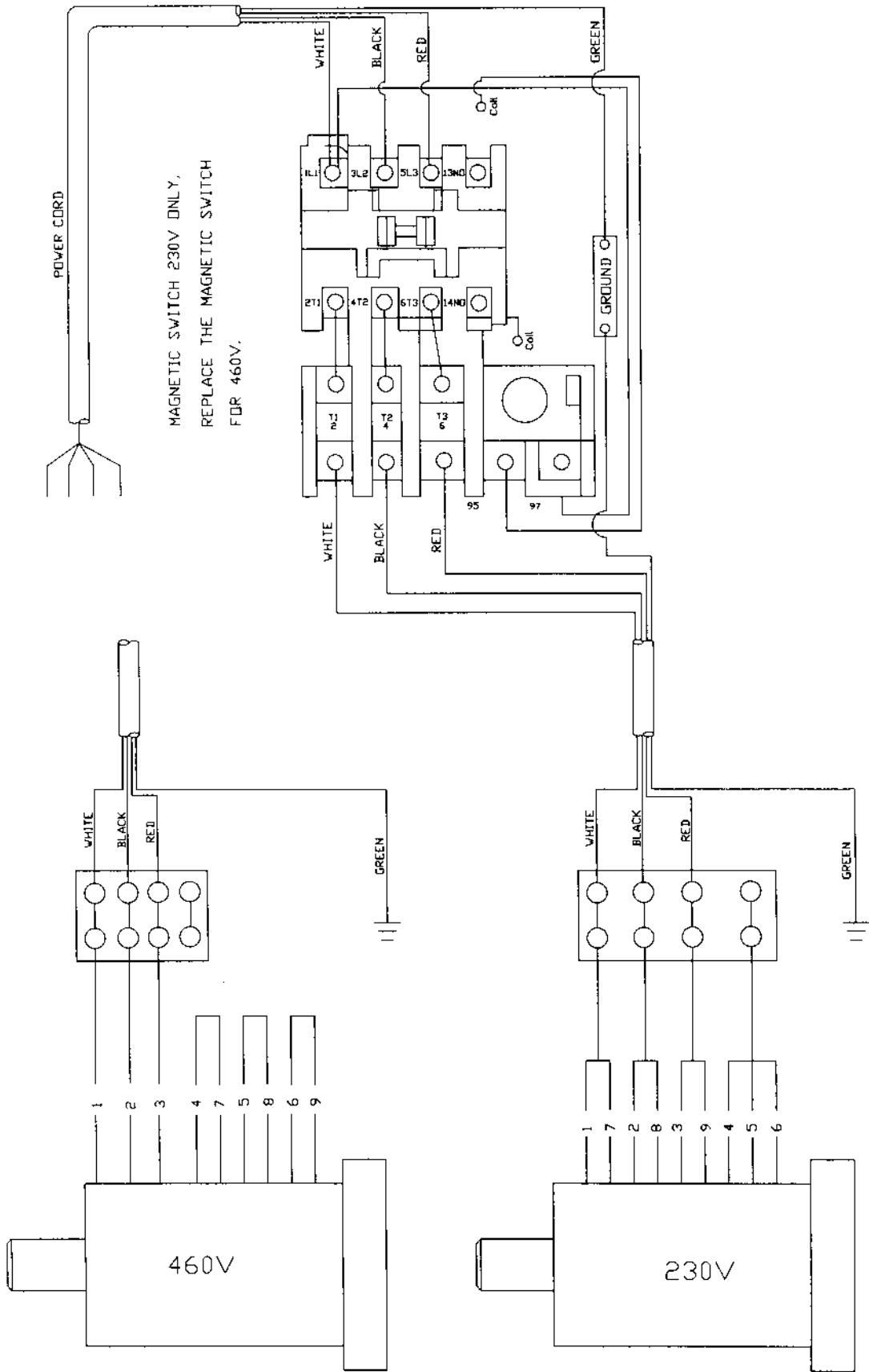
EXPLODED VIEW:   **Gear Box Assembly (208 Planer)**



Electrical Schematic: **Model 208-1** (Single Phase)



Electrical Schematic: **Model 208-3** (Three Phase)



**OPTIONAL ACCESSORIES (208 Planer)**

- 6292621 Knives (set of 4)
- 6292822 Low speed gear kit.
- 6292773 Hardware Kit.







To order parts or reach our service department, please call our toll-free number between 8:00 a.m. and 4:30 p.m. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately. Locating the EDP number of the part(s) required from your parts manual will also expedite your order.

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Fax No. (800) 274-6840

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